



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,871	03/24/2004	David E. Simmen	STL919990184US3	5489
45729 7590 02/24/2010 GATES & COOPER LLP 6701 CENTER DRIVE WEST SUITE 1050 LOS ANGELES, CA 90045			EXAMINER NGUYEN, CINDY	
			ART UNIT 2161	PAPER NUMBER
			MAIL DATE 02/24/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/807,871

Applicant(s)

SIMMEN, DAVID E.

Examiner

CINDY NGUYEN

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,12,13,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 3-11, 14-22, 25-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

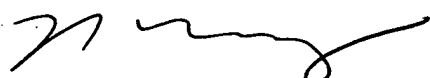
Art Unit: 2161

### DETAILED ACTION

This office action vacates the last office action (11/23/2009), which was sent in error. In view of the BPAI decision Examiner Reversed filed on 09/16/2009, PROSECUTION IS HEREBY REOPENED> A new ground rejection is set forth below.

37 CFR 1.198.> Reopening after a final decision of the Board of Patent Appeals and Interferences. When a decision by the Board of Patent Appeals and Interferences on appeal has become final for judicial review, prosecution of the proceeding before the primary examiner will not be reopened or reconsidered by the primary examiner except under the provisions of § 1.114 or § 41.50 of this title without the written authority of the Director, and then only for the consideration of matters not already adjudicated, sufficient cause being shown.

A TC Director has approved of reopening prosecution by signing below:



NESTOR R. RAMIREZ  
DIRECTOR  
TECHNOLOGY CENTER 2100

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 2161

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 12, 13, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaudhuri et al. (US 6363371, hereafter Chaudhuri).

Regarding claims 1, 12 and 23, Chaudhuri discloses: A method, an apparatus, an article of manufacture for optimizing execution of a query that accesses data stored on a data store connected to a computer (see col. 2, lines 59 to col. 3, lines 12; col. 4, lines 57-62), comprising:

using statistics on one or more expressions of one or more pre-defined queries to determine an optimal query execution plan for the query (i.e., "*A method identifies statistics for use in executing one or more queries against a database*" (col 2, lines 14-15) this implies that these queries already exist along with the statistics for these queries. Therefore these queries are already defined i.e., predefined);

executing the optimal query execution plan for the query in order to access the data stored on data store connected to a computer and then output the accessed data ( i.e., "*Suitable SQL queries include, for example, Select, Insert, Delete, and Update statements.*" Col. 6, lines 25-27. The queries consist of expressions or statements and some queries may just contain one expression or statement. The claim just requires having using statistics on at least one already defined query with at least one expression to determine an optimal query execution plan. "*Database server 220 comprises a query optimizer 224 to generate efficient execution plans for queries with respect to a set of indexes. In generating execution plans, query optimizer 224 relies on statistics on column(s) of table(s) referenced in a query to estimate, for example, the cost in time to execute the query against the database 210 using more than one possible execution plan for the query. Query optimizer 224 may then choose among possible execution plans for the query*"

Art Unit: 2161

(col 6, lines 30-40) The preceding excerpts indicates/implies that database server determines the most efficient execution plan for a particular query among many efficient execution plans based on some statistical data. The query optimizer relies on statistics on a query i.e. the cost to access the columns or tables referenced in the query expression/statement. Query execution plan is a plan to execute the query i.e., a plan to access data from a data source e.g., table etc. Therefore the referenced data sources (e.g., tables or columns of tables) in the query expression are the most essential part of the query expression/statement. There are costs associated with each execution plan. The statistics comprises data about cost to access columns of tables referenced in a query by various execution plans for the query. All execution plans for a particular query include paths to access the same data from the same data sources referenced in the query, because the query requires accessing particular data from particular data sources. However each execution plan has different way of accessing the same data and thus has different cost. Based on statistical data about cost and other related data, the optimizer picks the most optimum execution plan. The result of any query execution plan is the output of the query).

Regarding claims 2, 13, 24, Chaudhuri discloses: wherein each of the pre-defined queries is associated with an automatic summary table, a materialized view or a view (i.e., statistic is a summary structure/table associate with a set of one or more columns in a relation and is a histogram... see col. 6, lines 48-60).

***Allowable Subject Matter***

Claims 3, 14, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4-11, 15-22, 26-33 depend on claims 3, 14 and 25, and therefore are also objected to for the same reason.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CINDY NGUYEN whose telephone number is (571)272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2161

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. N./

Examiner, Art Unit 2161

/Apu M Mofiz/

Supervisory Patent Examiner, Art Unit 2161